

CERCLA SITE REASSESSMENT

CELOTEX CORPORATE DUMP

DECEMBER, 2013

SIGNATURE PAGE

Title: Site Reassessment for the Celotex Corporate Dump Site

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Section 1.0 Introduction

On February, 7, 2012, the Illinois Environmental Protection Agency's (Illinois EPA) Office of Site Evaluation was tasked by the United States Environmental Protection Agency (U.S. EPA) Region V to conduct a Site Reassessment (SR) at the Celotex Corporate Dump site in Wilmington, Will County, Illinois. (See Figure 1.)

Current U.S. EPA policy stipulates that a Site Reassessment be conducted to determine the current status of the Celotex Corporate Dump site. The Site Reassessment will consist of an evaluation of recent information to determine if further Superfund investigations are warranted. The Site Reassessment will supplement previous work, and is not intended to replace previous CERCLA assessments.

The Site Reassessment is designed to evaluate recent information that will help determine if the site qualifies for possible inclusion on the National Priorities List (NPL), or should receive a No Further Remedial Action Planned (NFRAP) designation. At the conclusion of the reassessment process Illinois EPA will recommend that the site be given a NFRAP designation, receive further Superfund investigations, or referred to another state or federal cleanup program.

The Celotex Corporate Dump site was initially placed on the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database August of 1987. This action was in response to the State of Illinois concerns that past site activities may have caused soil and sediment contamination of the surrounding community, on-site wetlands and the Kankakee River.

The Site Reassessment Report will describe current site conditions and illustrate how the site has changed since the last CERCLA investigation in 2004. This report will contain a summary of existing information that will include site history, current site conditions, evaluate past analytical data, and evaluate past remedial activities. The Site Reassessment will also support emergency response or time-critical removal activities if they are warranted.

Section 2.0 Site Description and History

The site was originally placed in CERCLIS as the Celotex Corporate Dump site, but later was expanded to include the Celotex Plant area. Consequently, this Site Reassessment includes both the dump and manufacturing area. The dump site is located just east of the Kankakee River on Kankakee Street in Wilmington, Illinois. The Celotex plant area is also located in Wilmington, just south of the dump site. Forked Creek forms the northern boundary of the original manufacturing plant area and separates it from the dump area.

(See Figure 2.)

Section 2.1 Site Description

The dump portion of the site is located just east of the Kankakee River on Kankakee Street in Wilmington, Illinois. Celotex operated this unpermitted solid waste disposal site on a 40 acre parcel of land sometime after 1955, located at the Northwest 1/4 of the Northwest 1/4 of Section 25, Township 33 North, Range 2 East, in Will County. This disposal area consists of a landfill, two surface depressions, and several unlined disposal lagoons. During the last CERCLA investigation, the landfills appear to be inactive, partially covered and vegetated. The lagoons contain three to four feet of clear water and lack emergent and surficial animal and plant life. This entire area is prone to flooding from the Kankakee River on the west and from the Forked Creek to the south. The perimeter of the site has three distinct wetland areas, one to the northeast, one to the south, and one to the southwest. The site is bordered on the northeast and east by residential areas. These residential areas provide several points of access to the site. Man made paths and trails are easily found throughout this area, showing some possible recreational uses of the site. (See Figure 3.)

The Celotex plant area is approximately five acres in size and is also located in Wilmington, just south of the 40 acre dump area. Forked Creek forms the northern boundary of the original manufacturing plant area. The plant appears to be a series of attached buildings that form two large manufacturing areas. These building are on the east and south side of the plant area. There are also several small free standing buildings on the western side of the plant area and beyond these building are three large storage silos.

There is also a landfill/dump area located on the plant side of Forked Creek. The landfill was identified on a topographic map and during the field portion of a previous CERCLA investigation. It is approximately 75 feet by 120 feet and is not an engineered disposal area. It appears that this area was filled before the landfill to the north of the plant was utilized. Due to the topography of this area soil boring locations were limited. The northern and eastern edge of this fill area has not been fully delineated. There is also the potential that some of the newer onsite buildings occupy filled areas.

The landfill located near the original manufacturing area does not have an engineered cover or runoff control system. There are no well-defined runoff patterns associated with the source but this entire area is sloped toward Forked Creek. The northern portion of this filled area borders Forked Creek and during high water conditions is in direct contact with it. Any runoff associated with this source ultimately flows into Forked Creek. Inorganics, mainly arsenic, copper, lead, nickel, and zinc, have been detected within the waste materials of this source.

Section 2.2 Operational History

Celotex began operations at the plant location circa 1955 and ceased operations in the mid-1980's. During this time period, disposal activities shifted from the plant area dump to the 40 acre dump area. The primary products from this operation were roofing shingles and tar paper. Wastes generated were then disposed of on both of the above mentioned properties and included: roof shingles, tar paper, wooden pallets and liquid sludge from a recycling mill. In

1979, a site visit by Illinois EPA Personnel revealed a load of waste oil staged next to a surface depression and an oil stained area. In this same year, a 30,000-gallon spill of asphalt material at the plant was cleaned up and disposed of at this dump site. In 1978, an enforcement case was started in by the Illinois EPA against Celotex, based on a history of compliance violations. This complaint alleged that the waste disposal site used by Celotex (the corporate dump site) was not operated within the current regulations applicable to it. These charges were later dismissed because the Illinois Attorney General failed to comply with discovery orders and due to inadequate documentation.

Section 2.3 CERCLA Investigative History

The Celotex Corporate Dump site was initially placed on the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database August of 1987. This was in response to long standing environmental issues at the dump site from years of improper disposal practices. The dump area is an unpermitted/uncontrolled landfill that is adjacent to the Kankakee River and Forked Creek.

CERCLA activities for the site include: Preliminary Assessment (PA) Illinois EPA, August 1988; Site Inspection (SI) Illinois EPA, November 1989; Site Inspection Prioritization (SIP) Illinois EPA, September 1995; Expanded Site Inspection (ESI) Illinois EPA, August 1997; Removal Activities (Plant Area) USEPA, September 1998; Site Assessment Report USEPA, 2001 and an Expanded Site Inspection (ESI) Addendum Illinois EPA, June 2004.

Non-CERCLA activities for the site include: 4(D) notice Illinois EPA, March 1998; Remedial Investigation Summary and Focused Baseline Risk Assessment Report, Environmental Resources Management (for Celotex) January 2002; and a review of the Remedial Investigation Summary and Focused Baseline Risk Assessment Report USEPA, February 2002.

Section 3.0 Other Cleanup Authorities and Activities

There has been no investigation activity at the site since the June 2004 ESI Addendum. Illinois EPA, did meet with the local city officials in 2010 regarding the future of the plant and dump areas. Prior to that meeting a site visit was conducted. At that time it appeared that site conditions were virtually unchanged from the June 2004, inspection.

Section 4.0 Migration Pathways

Section 4.1 Surface Water Pathway

The surface pathway starts where surface water run-off from the site enters the first perennial water body. This location is referred to as the probable point of entry (PPE). The PPE for the 40 acre landfill is any point where run-off from the site enters the wetland areas on the northern portion of the landfill. The plant is border

to the west and north by the Kankakee River and Forked Creek respectively. This area has no well-defined runoff paths so the PPE for the plant area is any point along the western or northern boundary where surface water runoff enters the Kankakee River or Forked Creek. (See Appendix A.)

The wetlands on the 40 acre landfill are contiguous to the Kankakee River, which is a fishery. The 15 mile Target Distance Limit for this water body is a 15 mile stretch that terminates downstream on the Illinois River near Goose Lake. The 1996 sediment samples had copper and manganese levels significantly higher than the Ontario Sediment Guidelines for Lowest Effects. The 2001, sediment samples indicated the presence of lead significantly higher than the Ontario Sediment Guidelines for Lowest Effects.

The wetlands associated with the site are listed by the Illinois Department of Conservation and the United States Department of the Interior. They are classified as a palustrine, forested, broad-leaved deciduous, temporarily and seasonally flooded environments. (See Appendix A.)

The river is also a source of drinking water for the City of Wilmington. The surface water intakes are upstream of the PPE and do not appear to be affected by the site. The City of Wilmington's waste water treatment plant (WWTP) is also located along this portion of the river. The discharge point for the WWTP is near the PPE for the wetlands, and the WWTP has a current permit for this discharge from the IEPA.

Section 4.2 Soil Exposure Pathway

This pathway evaluates surficial contamination and the likelihood that people and sensitive environments will be exposed to them. The 40 acre landfill is fenced along its west, south, and eastern sides leaving the north boundary open and accessible to the public. The eastern side of the fence is also breached at the end of Hayden Court. Throughout the site are paths and trails that are well defined indicating frequent use. The surface of the plant area is a mix of: urban soils, gravel, sand, broken brick, concrete, and construction debris. The surface of the 40 acre landfill has: off-specification products lose gravels and sands, silty-loams, clay and is sparsely vegetated in the landfill area. All of the landfill areas appear to lack adequate cover material. Findings from the 1989, Site Inspection revealed the presence of arsenic, barium, cadmium, chromium, lead, and zinc on the surface of the site. Approximately 4500 people live within a one mile radius of the site and approximately 11 homes that border the eastern edge of the 40 acre landfill. There are no schools or daycare facilities within 200 feet of the site or on site workers. (See Appendix B.)

Population between	
0 – ¼ mile	959
¼ - ½ mile	1123
½ - 1 mile	1183
1 – 2 miles	1825
2 – 3 miles	1432
3-4 miles	1407

Section 4.3 Groundwater Pathway

Residents using private wells are the primary users of groundwater in the Wilmington area. These wells range from approximately 15-80 feet in depth, (sand and gravel) and approximately 150-700 feet in depth (Silurian Dolomite). Separating these two aquifers is a confining layer of blue shale and blue clay. The shallow sand and gravel aquifer is the aquifer of concern (AOC). Underlying the glacial-drift is the Ft. Atkinson Limestone and Scales Shales, and the Galena and Platteville Groups.

The closest private well is located approximately 2000 feet southwest of the site on the opposite side of the Kankakee River. The other wells are east of the Kankakee River approximately 3/4 of a mile from the site. The 1989 Site Inspection did collect three monitoring well samples and found elevated inorganic levels in two of them. Due to the type of contaminants found during the Site Inspection and the location of the private wells no additional groundwater samples were collected from the 40 acre landfill.

Section 4.4 Air Pathway

Residential areas border the eastern side of the site. There are no air related complaints on file with the Illinois EPA, and the landfill operation would not generate significant air emissions. No formal air samples were collected but air monitoring was performed for screening purposes. Both the photo-ionization (PID) and flame-

ionization (FID) methods were utilized, with the FID being more responsive to the conditions at the site.

Wind erosion of the surface soils is also minimal except during high winds due to the particle size and soil types of the contaminated soils.

Section 5.0 Summary and Conclusion

The Celotex Corporate Dump site was initially placed on the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database August of 1987. This was in response to long standing environmental issues at the dump site from years of improper disposal practices. The dump area is an unpermitted/uncontrolled landfill. The site has been under CERCLA investigation since 1987 with Emergency Response activity in 1998.

The site originated as the Celotex Corporate Dump site and later was expanded to include the Celotex Plant area. The Site Reassessment includes both the dump and manufacturing area. The dump site is located just east of the Kankakee River on Kankakee Street in Wilmington, Illinois. The Celotex plant area is also located in Wilmington, just south of the dump site. Forked Creek forms the northern boundary of the original manufacturing plant area and separates it from the dump area.

Historically, heavy metals have been detected in the soils, groundwater and sediments at the site. Copper and lead levels in the sediment along the Kankakee

River meet the CERCLA criteria for an observed release for the Surface Water Pathway. Attribution from Celotex to this pathway has been established from on site soil and groundwater sample results with elevated levels of both copper and lead.

On site groundwater samples exceeded the Maximum Concentration Levels (MCLs) for arsenic and lead. However, groundwater is not used for drinking water or as a resource.

The Soil Exposure Pathway has been evaluated through the use of numerous soils samples. In the past Polychlorinated Biphenyls (PCBs) were found in the dump area but additional sampling failed to duplicate those results.

Section 6.0 References

- United States Department of Commerce, Economics and Statistics
 Administration, Bureau of Census. Census 2000: Summary File 1. In:
 ESRI Data & Maps 2006 Data Update, http://www.esri.com/data/data-maps/overview.html. Accessed July, 2007
- United States Environmental Protection Agency. Hazard Ranking System Guidance Manual. Office of Solid Waste and Emergency Response. EPA 540-R-92-026. Document No. PB92963377. November 1992.

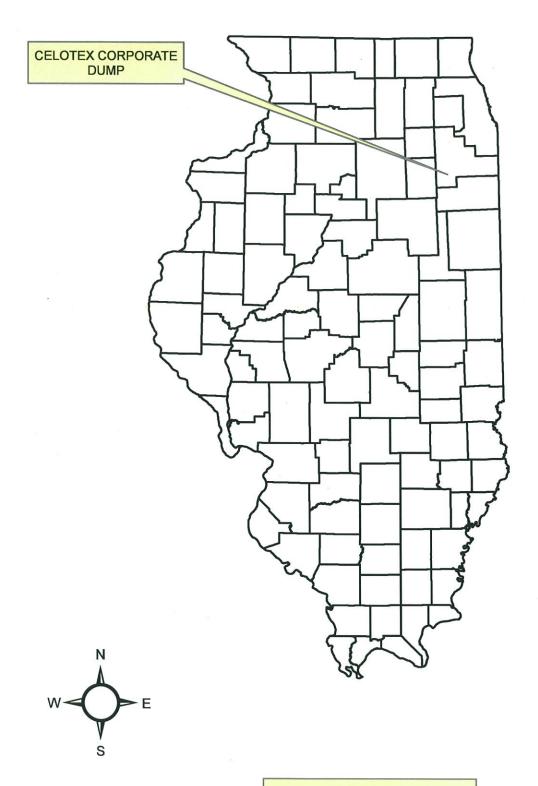
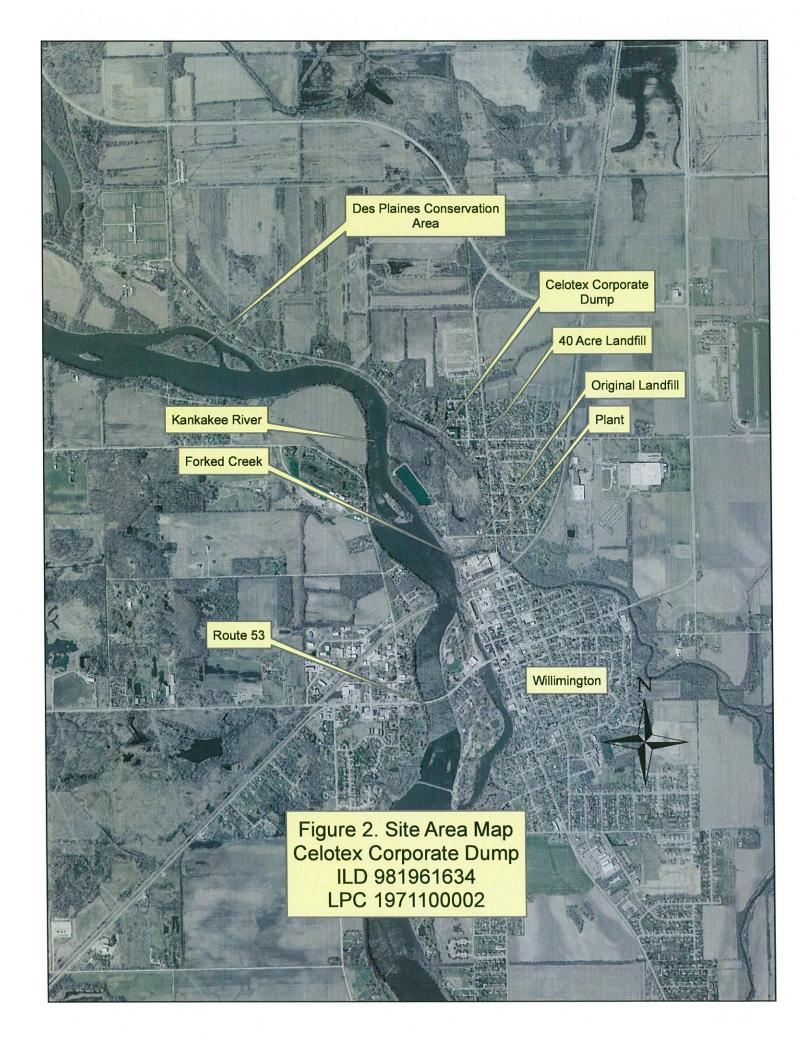


Figure 1, Site Location Map Celotex Corporate Dump ILD 981961634 LPC 1971100002





APPENDIX A 15 Mile Target Distance Limit Map



APPENDIX B 4 Mile Radius Map

4-Mile Radius Map

Celotex Corp. Dump ILD 981961634

